

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A surface-emitting light emitting device capable of emitting light in a direction perpendicular to a substrate, comprising:
 - an emitting surface that emits the light;
 - a base member that is provided on the emitting surface;
 - an optical member that is provided on an upper surface of the base member,
the optical member having a maximum cross section and a lower surface, the maximum cross section being parallel with the lower surface, the lower surface being in contact with the upper surface of the base member, the maximum cross section being at a distance from the upper surface of the base member, a width of the maximum cross section being larger than a width of the lower surface;
 - the surface-emitting light emitting device being a surface-emitting semiconductor laser;
 - the substrate being a semiconductor substrate;
 - the surface-emitting semiconductor laser being formed on the semiconductor substrate, including a resonator having a pillar portion, and the emitting surface provided on a top surface of the pillar portion; and
 - a diameter of a bottom surface of the base member being smaller than a diameter of the top surface of the pillar portion.
2. (Original) The surface-emitting light emitting device according to Claim 1,
the base member being made of a material that transmits light of a predetermined wavelength.
3. (Original) The surface-emitting light emitting device according to Claim 1,

the optical member functioning as a lens.

4. (Original) The surface-emitting light emitting device according to Claim 1,
the optical member functioning as a polarizer.
5. (Original) The surface-emitting light emitting device according to Claim 1,
the optical member being in the shape of a sphere or an oval sphere.
6. (Original) The surface-emitting light emitting device according to any of
Claim 1,
a sealing member being formed so as to cover at least part of the optical
member.
7. (Original) The surface-emitting light emitting device according to Claim 1,
the upper surface of the base member being a curved surface.
8. (Original) The surface-emitting light emitting device according to Claim 1,
an angle made between the upper surface of the base member and a surface on
a side part of the base member that contacts the upper surface being an acute angle.
- 9-10. (Canceled)
11. (Previously Presented) The surface-emitting light emitting device according to
Claim 1,
the substrate being a semiconductor substrate;
the surface-emitting semiconductor laser including a resonator formed on the
semiconductor substrate; and
the emitting surface being provided on a rear surface of the semiconductor
substrate.
12. (Previously Presented) The surface-emitting light emitting device according to
Claim 1,
the substrate being a semiconductor substrate;

the surface-emitting semiconductor laser including a resonator formed on the semiconductor substrate;

a concave part being formed in a rear surface of the semiconductor substrate;

a light path adjusting layer being formed by being buried in the concave part;

and

the emitting surface being provided on an upper surface of the light path adjusting layer.

13. (Canceled)

14. (Currently Amended) A surface-emitting light emitting device capable of emitting light in a direction perpendicular to a substrate, comprising:

an emitting surface that emits the light;

a base member that is provided on the emitting surface;

an optical member that is provided on an upper surface of the base member, the optical member having a maximum cross section and a lower surface, the maximum cross section being parallel with the lower surface, the lower surface being in contact with the upper surface of the base member, the maximum cross section being at a distance from the upper surface of the base member, a width of the maximum cross section being larger than a width of the lower surface;

the substrate being a semiconductor substrate;

the semiconductor light emitting diode including a light emitting element that is formed on the semiconductor substrate, and a pillar portion that includes an active layer that forms at least part of the light emitting element;

the emitting surface is provided on a top surface of the pillar portion; and

a diameter of a bottom surface of the base member being smaller than a diameter of the top surface of the pillar portion.

15. (Previously Presented) The surface-emitting light emitting device according to Claim 1,

the base member being formed integrally with the pillar portion.

16. (Original) The surface-emitting light emitting device according to Claim 15,
the base member being composed of a semiconductor layer.

17-18. (Canceled)

19. (Original) The surface-emitting light emitting device according to Claim 1,
the optical member functioning as a lens and being in the form of a truncated
sphere;

a refractive index of the optical member being approximately equal to a
refractive index of the base member;

a radius of curvature "r" of the optical member and a distance "d" from the
emitting surface to a highest point of the optical member satisfies,

$$r \leq 0.34 * d.$$

20. (Original) An optical module, comprising:
the surface-emitting light emitting device according to Claim 1, and an optical
wave-guide.

21. (Original) An optical transmission apparatus, comprising:
the optical module according to Claim 20.

22. (Currently Amended) A method of manufacturing a surface-emitting light
emitting device capable of emitting light in a direction perpendicular to a substrate,
comprising:

(a) forming a part that has an emitting surface and functions as the light
emitting element;

(b) forming a base member on the substrate;

(c) discharging a droplet onto an upper surface of the base member to form an optical member precursor;

(d) hardening the optical member precursor to form an optical member;
the surface-emitting light emitting device being a surface-emitting semiconductor laser;

the substrate being a semiconductor substrate;

the optical member having a maximum cross section and a lower surface, the maximum cross section being parallel with the lower surface, the lower surface being in contact with the upper surface of the base member, the maximum cross section being at a distance from the upper surface of the base member, a width of the maximum cross section being larger than a width of the lower surface;

the surface-emitting semiconductor laser being formed on the semiconductor substrate, includes a resonator having a pillar portion, and the emitting surface provided on a top surface of the pillar portion; and

a diameter of a bottom surface of the base member being smaller than a diameter of the top surface of the pillar portion.

23. (Original) The method of manufacturing the surface-emitting light emitting device according to Claim 22,

the droplet being discharged by using an ink jet method in step (c).

24. (Original) The method of manufacturing a surface-emitting light emitting device according to Claim 22, further comprising:

(e) adjusting wettability of the upper surface of the base member with respect to the droplet before (c).

25. (Previously Presented) The surface-emitting light emitting device according to any of Claim 1,

the optical member being formed over an entire top surface of the base member.

26. (Previously Presented) The method of manufacturing a surface-emitting light emitting device according to Claim 22,

the optical member being formed over an entire top surface of the base member.

27. (New) The surface-emitting light emitting device according to Claim 1, the base member being made of resin.

28. (New) The surface-emitting light emitting device according to Claim 14, the base member being made of resin.

29. (New) The method according to Claim 22, the base member being made of resin.

30. (New) The surface-emitting light emitting device according to Claim 1, a height of the base member being shorter than a height of the optical member.

31. (New) The surface-emitting light emitting device according to Claim 14, a height of the base member being shorter than a height of the optical member.

32. (New) The method according to Claim 22, a height of the base member being shorter than a height of the optical member.